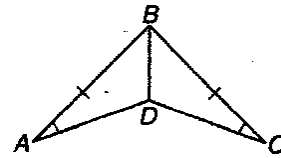


## Unit 4 Worksheet 7 ASA and AAS

Fill in the reasons for the proof.

1. **Given:**  $\overline{AB} \cong \overline{CB}$ ,  $\angle A \cong \angle C$ ,  $\overline{DB}$  bisects  $\angle ABC$

**Prove:**  $\triangle ABC \cong \triangle CBD$

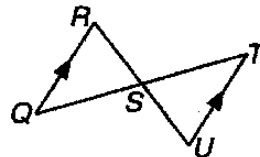


| STATEMENTS | REASONS |
|------------|---------|
|------------|---------|

- |  |    |
|--|----|
| 1. $AB \cong CB$                       | 1. |
| 2. $\angle A \cong \angle C$           | 2. |
| 3. DB bisects $\angle ABC$             | 3. |
| 4. $\angle ABD \cong \angle CBD$       | 4. |
| 5. $\triangle ABC \cong \triangle CBD$ | 5. |

2. **Given:** S is the midpoint of  $\overline{QT}$ , and  $\overline{QR} \parallel \overline{TU}$

**Prove:**  $\triangle QSR \cong \triangle TSU$

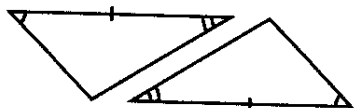


| STATEMENTS | REASONS |
|------------|---------|
|------------|---------|

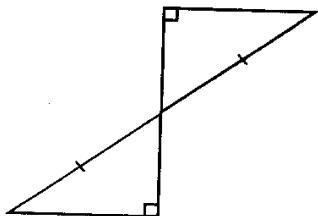
- |  |    |
|--|----|
| 1. S is the midpoint of QT             | 1. |
| 2. $QR \parallel TU$                   | 2. |
| 3. $QS \cong TS$                       | 3. |
| 4. $\angle QRS \cong \angle SUT$       | 4. |
| 5. $\angle QSR \cong \angle TSU$       | 5. |
| 6. $\triangle QSR \cong \triangle TSU$ | 6. |

For #3- 16, decide if you will use SSS, SAS, ASA, AAS or NONE to prove the triangles congruent.

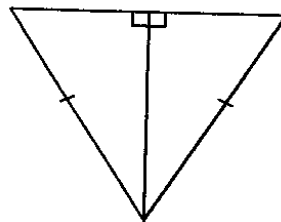
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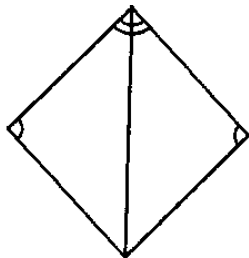
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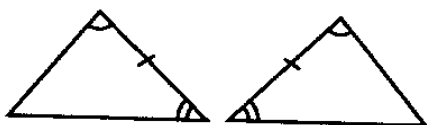
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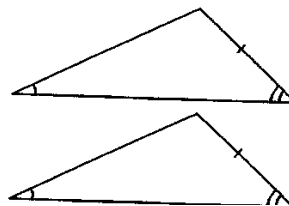
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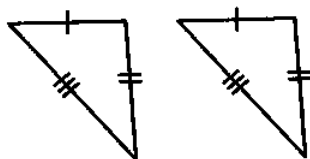
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8.



9.



10.



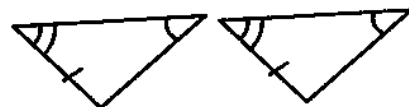
11.



12.

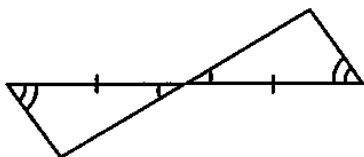


13.



14.

15.



16.

